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ABSTRACT

Major historical and recent developmental stages of professional education are reviewed and the outlook for the 1980's is discussed. Topics include: the admissions outlook and the professional school experience: curricular development; faculty training, evaluation, and rewards; labor market prospects after professional school; continuing education and licensure; and quality assessment in terms of accreditation and ratings. Each discussion supports the theory that dramatic change and experimentation will not be part of professional education in the next decade, but that change and renewal based on already existing practices will be the standard. Two distinctive elements of professional education, which emerged during the 1970's and will guide further development in the 1980's are: (1) the integration of theory and practice, and (2) a growing trend toward integration, cooperation, and collaboration between and among professions, professional schools, and private and government agencies. The latter is highlighted as the most important guiding influence in the next decade. Within that frame of reference, six recommendations--including refining admissions criteria to incorporate measures of personal development and interpersonal skills--are offered. A bibliography is included. (SW)

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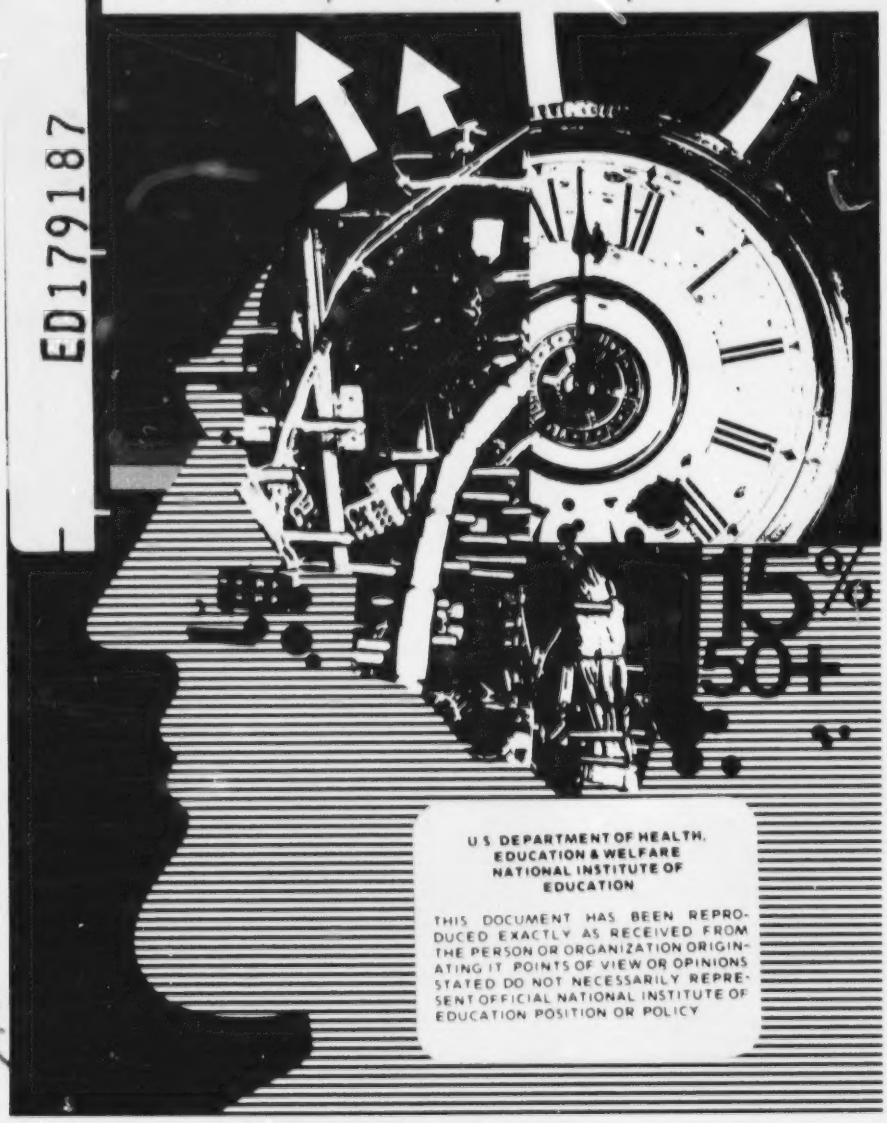
REPORT

Professional Education in the Eighties: Challenges and Responses

Glenn F. Nyre and Kathryn C. Reilly



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Professional Education in the Eighties: Challenges and Responses

Glenn F. Nyre and Kathryn C. Reilly

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Of course, were it not for Jonathan Fife's invitation to write this paper, none of this would have happened. For the opportunity to do so, we are grateful to him and the ERIC Clearinghouse on Higher Education.

Foreword

In 1974, when G. Lester Anderson wrote the first ERIC-AAHE Research Report on education of the professions, there was only a stirring of curriculum development going on in that area. As often happens, external pressures became so strong that internal change was inevitable. Each profession had its own distinctive pressure: for lawyers it was the Watergate scandal; for the medical profession it was the increased number of malpractice suits; for engineers and scientists it was public concern over the environment. There were also pressures common to all the professions: increased student applicants, greater emphasis on the enrollment of women and minorities, and changes in market demand.

Because of the changes that have taken place since the early 1970's, and among all the areas and levels of higher education the professions show the greatest continued growth, it was believed that it was time for a further examination of the education of professionals.

The Clearinghouse turned to the Evaluation and Training Institute because of the work being done by them in this area, including an eighteen-month study for the National Science Foundation that included reviewing engineering and medical schools. Glenn F. Nyre, Vice President and Executive Director, and Kathryn C. Reilly, senior research associate at the Institute were asked to develop a Research Report that would review the developments that have taken place in education of the professions over the last decade and indicate what is likely to happen in the next ten years. The monograph they have written, together with the Anderson Research Report, provides a substantial foundation for any discussion of this topic.

Jonathan D. Fife, Director
ERIC® Clearinghouse on Higher Education

Contents

Overview 1

An Amorphous Conglomorate 6
Definitions and Differentiations 6
Historical Development 7
Modern Development 9

Entrance and Experiences 11
Admissions Outlook 11
The Professional School Experience 15

Change and Renewal 17
Curricular Development 17
Faculty Training, Evaluation, and Rewards 18

Life After Professional School 22
Labor Market Prospects 22
Continuing Education and Licensure 29

Quality Assessment 32
Accreditation 32
The Rating Game 34

A View from the Present Looking Ahead: Summary and Recommendations 36
Integrating Theory and Practice 36
Collaboration and Cooperation 38
Recommendations 40

Bibliography 41

Tables

Table 1.	Occupations Designated Professions by Various Publications, 1955-77	4-5
Table 2.	Earned First-professional Degrees, by Field of Study: United States, 1970-71 to 1984-85	12
Table 3.	Number of Professional Workers and Percentages of Professional Workers to Population and Workforce: 1970, 1975, and 1978	23
Table 4.	Changes in Numbers and Percentages of Males in Selected Professional Occupations, 1970-1978	24
Table 5.	Changes in Numbers and Percentages of Females in Selected Professional Occupations, 1970-1978	25
Table 6.	Comparisons of Percentages of Female Professional and Technical Workers, 1975 and 1978	26-27-28

Overview

Professions periodically, and sometimes quite rapidly, pass through stages of public worship, damnation, and toleration. The health professions are praised for advances in health care, then blamed for inequities in the delivery of that care. The legal profession is thanked for its dedication to justice, but defamed as largely responsible for the abuses of Watergate. And so on down the line. The professions are so inextricably bound up with the status and structure of society—impacting and responding at the same time—that they are highly visible and influential and therefore, rarely ignored. This is true, except perhaps in education, where the study of professional education has never moved far beyond an obligatory recognition of its existence.

The reader should not be misled by the extensiveness of the bibliography. It is necessarily lengthy because the concept of "the professions" is so large that it has been dealt with largely on a piecemeal, special interest basis. Every conceivable topic of concern to post-secondary education generally can be carried off in as many directions as there are professions. At the other extreme, professional education is joined with discussions of graduate education, and the necessary distinctions are seldom made.

Only recently, and then very rarely, have there been attempts to view the professions as a whole, and those few exceptions become evident by contrast in the course of this review. Lewis B. Mayhew and G. Lester Anderson are most responsible for not letting professional education as a field of inquiry fall through the cracks of specialization. Only those who have combed and sifted through the literature in as extensive a fashion as was done in the preparation of this monograph can fully comprehend the debt owed them for this.

The present review begins not so much with a definition of professional education as with a case against attempting such an endeavor. A brief review of the major historical and recent delevopmental stages, which have brought the professions to their current amorphous state, further explicates the problems of definition. Discussions of curricula, faculty, students, and professionals themselves follows, as does a section on quality assessment of professional schools.

Each discussion supports the theory that dramatic change and experimentation will not be a part of professional education in the next

decade, but that change and renewal based on already existing practices will be the standard, as the seeds of individual institutional advances sown during the 1970s begin to spread throughout and among the various fields. Student and societal pressure to change has already peaked and may even begin to fade for several years. Surely, there remain concerns about the equity of entrance requirements and service delivery strategies, but these issues have most likely found their most eloquent spokespersons already—and possibly their most fervent listeners. As will be seen in this volume, many professional schools have taken on these and the other challenges that have now become the legacy of the seventies, and they will need to assume dual service as both models to and prodders of others to assure that responsive change continues and spreads. As a result, there may be elevated professional interest in change, but major new concerns will probably not be forthcoming. Much has been accomplished during the past several years and new agendas for professional education have been set. In the 1980s, the forecast is that they will be met.

Throughout the volume, two distinctive elements of professional education—which were forged into a new shape during the 1970s and will guide further development in the 1980s—surface with striking frequency: (1) the integration of theory and practice, and (2) a growing trend toward integration, cooperation, and collaboration between and among professions, professional schools, and private and government agencies. The latter is highlighted as the most important guiding influence in the next decade, and within that frame of reference it is recommended that those joint efforts should take the form of promoting:

- The refinement of admissions criteria to incorporate measures of personal development and interpersonal skills essential to the delivery of services to a client;
- The integration of theoretical and practical perspectives in the undergraduate curricula preparing students for a wide range of professional study;
- The introduction of strategies for professional development that would incorporate faculty, administrative, organizational, institutional, and instructional development;
- The reassessment of restrictions on numbers of part-time faculty, with a view toward faculty-sharing among both various professional schools and institutions;

- The establishment of a mechanism to incorporate the suggestions of currently existing government policy-making bodies concerning accreditation standards for professional schools; and
- The evaluation of mandatory continuing education courses for professional relicensure to determine their actual benefits to the practitioners and society.

Table 1. Occupations Designated Professions by Various Publications, 1955-1977.

Occupations	Designated as Professions by						
	Blauch 1955	Schein 1972	Hughes 1973	Margulies and Blau 1973	Boley 1977	Bureau of Labor Statistics 1977	Nat. Ctr. for Ed. Statistics 1977
Accounting	X					X	
Architecture	X	X		X		X	
Art						X	
Business	X	X		X	X	X	
Chiropody							X
Dentistry	X			X	X	X	X
Education		X		X	X	X	
Engineering	X	X		X	X	X	
Forestry				X	X	X	
Journalism				X	X	X	
Law	X	X	X	X	X	X	X
Library Science				X		X	
Medicine		X	X	X	X	X	X
Music						X	
Nursing				X		X	

Table 1. (Continued)

Occupations	Designated as Professions by						
	Blauch 1955	Scnein 1972	Hughes 1973	Margulies and Blau 1973	Boley 1977	Bureau of Labor Statistics 1977	Nat. Ctr. for Ed. Statistics 1977
Optometry				X			X
Osteopathy							X
Pharmacy	X			X		X	X
Podiatry							X
Public Health				X		X	
Public Relations						X	
Religion (Theology)			X	X		X	
Research						X	
Sciences						X	
Biological						X	
Chemical						X	
Computer						X	
Social						X	
Social Work			X	X		X	
Veterinary Medicine				X			X

Definitions and Differentiations

The problem of defining professional education is not unlike the difficulty arising from attempts to categorize any aspect of postsecondary education. First a distinction between "professional" and other types of education must be made, and then the differences, if any, between "education" and other forms of formal or informal learning must be distinguished.

The circularity of attempts to create definitions is illustrated by the fact that the term "professional" traditionally has been used to classify the types of persons obtaining professional education, and "professionals" have, in turn, been defined by the designated occupations they profess to practice, general characteristics determined by various writers to be "professional," or the ways in which various professions distinguish themselves from one another.

Recent literature concerned with defining professions is abundant, and it is divided primarily along the above three dimensions. A study of professional education can easily become bogged down in the literature of definition. This problem is most easily avoided if one simply accepts the Bureau of Labor Statistics' classification of professional and technical workers, even though a distinction is not made between the two groups. Table 1 displays the different occupations designated as professions by various authors and other sources since 1955.

Although each source did not always explicitly state that each occupation listed was determined as "professional," this could be inferred from the occupations treated in the publications. Table 1 illustrates the difficulty of defining "professional" by selected occupations, since various authors include some fields and not others. Only law has been treated as a profession by all seven sources. Theology, one of the oldest fields of "professional" calling, received professional status from only three sources. For the purposes of this monograph, any occupation listed in Table 1 can be considered "professional," since this research represents a review of major works and it is not our intention to develop a definitive list of professional occupations.

The predominant tendency in recent literature is to treat the nature of professionalism or the characteristics of the professional in general as a way of defining the term. Writers seem to have heeded Hughes, as quoted in Vollmer and Mills (1966):

> . . . in my own studies I passed from the false question "Is this occupation a profession?" to the more fundamental one "What are the circumstances in which people in an occupation attempt to turn it into a profession, and themselves into professional people?" (p. v).

Vollmer and Mills' approach was characterized by the avoidance of an attempt to list occupations qualifying as professions. Instead, they distinguish between the businessman, who gives the customer what is wanted, and the professional, who gives the client what is needed. This method was adopted by more recent authors (Anderson 1974; Mayhew 1971), and as Anderson points out, although others have developed criteria for definitions (Becker 1962; Schein 1972), Flexner's definition (1915) still forms the basis for all definitions derived since:

> (1) Professional activities have a large intellectual component; the skill, craftsmanship, or practice of a profession rests on a body of knowledge. This knowledge is not only empirically derived but is also a product of research or scholarly activity. (2) The practice of a profession involves a craftsmanship, meaning knowledge is put to use; this craftsmanship is teachable and learnable, and is socially useful. (3) Society allocates to those who practice a profession a great measure of control of the education for it and the right to be selfpolicing. The quality of professional service, it is presumed, is to be judged only by other professionals in the same field. Hence a profession is governed by a code of ethical conduct to which its members are held, and the professional person is presumed to be basically motivated by altruism. (4) The professional practices his craftsmanship in terms of professional judgments of his peers (p. 3).

More recent authors (e.g., Bledstein 1976; Fife in Shulman 1979; Larson 1977; and Mayhew 1971) contrast the role or characteristics of a professional person with tradesmen or craftsmen in terms of their specialized knowledge acquired through long and intensive academic preparation.

Thus the definition of the term "professional" has quite consistently been linked to a description of the "education" or academic training received, and the definition of professional education is dependent on differentiating professional education from other forms of training.

Historical Development

The tradition of academic training based on a body of theoretical knowledge or cognitive base is an outgrowth of the development of the professions themselves. This, in turn, is related to forms of practical training influenced by the professional training of doctors, lawyers, and theologians in mid-eighteenth century England and then later in the United States, with the theoretical and classical education

provided by institutions of higher learning. In a comprehensive review of the historical development of professional education based on case studies of four professions (medicine, law, social work, and education), Gartner (1976) pointed out that it was no surprise that the professions turned to the universities to "add lustre to their (the professions') authority," extended "the range of their legitimation," and give credence "to the argument that professional wisdom was based not only upon particular skills, but upon generalized learning" (p. 34).

A comprehensive reference list on the subject of the development of professional education and the history of professions in general is also provided by Haber (1974). He points out that the expansion of the professions and restriction of entry into them at the beginning of the twentieth century was a reflection of a new social environment in which the egalitarian expansionism of the previous fifty years was slowed, due to more social and economic barriers, the growth of experimental science, professional licensing, and the new link between higher and professional education.

This link between higher education and the professions was evidenced by the attachment of some new professional schools to universities, as in the case of Harvard Law School in 1817 and Johns Hopkins Medical School in 1893, and the closing of many proprietary schools, developed between 1830 and 1880. Haber (1974) states that these latter schools "were usually profit-making enterprises established by practitioners and supported by student fees . . . and in which entry . . . became exceedingly easy and graduation a matter of course" (p. 251).

Bledstein (1976) condemns the nineteenth century American university, in contrast to the European university, for being too client and consumer-oriented, as demonstrated by the dramatic increases in the numbers of institutions themselves and in their attempts to increase and diversify their educational services. Bledstein claims that it was the American university in the nineteenth century that held

> before the society the image of the modern professional person, who committed himself to an ethic of service, was trained in scientific knowledge, and moved his career relentlessly upward (p. 353).

Haber's analysis of the consequences of this link is also described in terms of the labor market, but with a different emphasis:

> The linking of the professional school to state and private universities meant sheltering professional education, to some extent, from market re-

> quirements—such education need not cover costs—and afforded more scope for raising standards. To the degree that the technical knowledge of the professions became more scientific, it became more theoretical, and the mounting requirements of the professional organizations for academic training became more persuasive (p. 261).

Modern Development

The historical relationship between the professions and institutions of higher education, which is reflected in the definition of "professional education," has also influenced its modern development. According to Gartner (1976), the mode of professional preparation that had developed in university settings—scientifically rigorous, requiring long preparation, and based on guild-like restrictions to professional practice that often distanced the practitioner from the client—was no longer acceptable to the many consumers by 1960. They were becoming better educated, as more and more postsecondary educational opportunities became available, and more demanding of different kinds of services.

In the years following World War II, and increasingly in the 1960s, both the nature of professional practice and the preparation for it began to be questioned, particularly by those groups who felt they were neither well served by the professions nor welcome as practitioners. The civil rights' movement brought with it pressure for new and more responsive service systems, and met with some success in changing the forms of governance of some of the services, bringing some of those pressuring for change into the system, and changing the form and substance of training required in certain professions.

The major challenge of the 1970s for professional education was how better to relate actual practice to theory—how to "bring the value of the work-site experience to the academic" when professional preparation historically had been "ensconced within colleges and universities" (Gartner 1976, p. 214; also see Argyris and Schön 1974; and Hughes 1973). Gartner's approach was meant to bridge the gap between theory and practice by providing training in new practice modalities, such as simulational training sites, not in on-the-job training or "clinical" situations in the university classroom. His training strategy provided the opportunity for trainees to meet together as a group to share experiences, analyze problems, try out differing strategies and practices in role plays and simulations, to test-out in actual practice strategies that have been developed, and then to rehash them in the simulational laboratory. Such sessions would be led by a person skilled as a trainer to manage the group and get everyone involved.

This model's emphasis on the integration of theory and practice was described by the role of the universities in relation to the professions:

> But the universities must do more than to accept the professions as they are, to accept practice as presently performed, and to engage the practitioner-to-be only at the immediate "contact" level. The role of the university is to examine the professions, to question present practice, to take the student from the point of contact to deeper knowledge and broader understanding, to learn to see alternative strategies and to understand differing explanations (p. 223).

Concern with the integration of theory and practice in professional education is not representative of the general approaches tracing modern development. Anderson's (1974) work, for example, exemplifies the attempt to draw together the several issues and problems of professional education in the 1970s. He identified trends in the characteristics of the professional population, predicted increased student enrollment, criticized the literature prior to 1974 for neglecting to discuss commonalities of instruction or teaching in professional education, pointed out shifts in types of objectives for professional education and the need for continuing education in the professions, as well as the continuing problem of the relationship between the universities and the professional schools about accountability and accreditation. He also defined socialization—where emphasis on mere knowledge is reduced and impact of mentors and significant others as well as the total environment of field and lab studies is increased—as the conceptual base on which the teaching of professions should rest (pp. 15-18).

Professional education appears to be an amorphous conglomerate because of the variety of definitions used to describe it and the rather irregular course of its historical and modern development.

Since practically any occupation can be termed "professional" by anyone seeking to assign some degree of status to a given field, it was more appropriate for this review to consider the different criteria for a definition than to specify a list of occupations considered to be professional.

The most common criterion describing professions, beginning early in their history and continuing into modern times, is the emphasis on an intensive education program composed of training both in the theory and practice of a distinct, specialized body of knowledge. This common thread has linked professional education to the universities, a connection that has implications for the state and structure of professional education, as described in the next section.

Admissions Outlook

The admissions picture for professional schools in the 1980s and 1990s will differ considerably from that for colleges, universities, and graduate schools generally. While these postsecondary education institutions will focus on the problem of recruiting enough students, professional schools will be concerned with coping with larger numbers of applicants and developing standards to enable greater selectivity. Colleges and universities have already faced an enrollment drop of 3.5 percent between the first term of 1977 and that of 1978, and population statistics indicate that the number of 18-year-olds will decline by as much as 18 percent by the mid-1980s (Johnson 1979). Thus, the adult population, particularly women returning to school and part-time students, will be prime targets for admissions recruiting at the undergraduate and graduate levels.

Johnson documents this trend and gives as example the University of Redlands in California, which has almost tripled its enrollment by building an adult education program emphasizing "mid-life" education and serving 2,400 older students during night and weekend classes in 64 California cities (p. 9).

Professional schools may also begin tapping these sources, but not because they will be feeling the same enrollment pressures; on the contrary, they have experienced growths in enrollment and increases in the numbers of degrees conferred.

Business school enrollment beyond the baccalaureate increased 27 percent between 1976 and 1978 (Jacobson 1979), and the engineering statistics presented by the Engineering Manpower Commission of the Engineers Joint Council (1979) show an overall gain of 67 percent since 1973, when engineering enrollments were at a twenty-year low.

Law schools registered the largest gains in enrollment during the 1970s—a 100 percent increase between 1964 and 1974; however, 1975 represented a peak year, and the growth in enrollment was less than 1 percent in both 1976 and 1977 (*Chronicle of Higher Education*, April 16, 1979). The increase in law school enrollment can be attributed, at least in part, to the increased numbers of women and Blacks matriculating during this period—women increased from 2,100 to 21,000, while Blacks and other minority groups increased from around 2,000 to 8,000 (Cardozo 1977, p. 45).

12 *Table 2. Earned First-professional Degrees, by Field of Study: United States, 1970-71 to 1984-85.*[1]

Year	Total	Medicine[2]	Dentistry[3]	Other Health Professions[4]	Law[5]	Theolog.[6]	Other[7]
1970-71	37,946	8,919	3,745	2,459	17,421	5,055	311
1971-72	43,411	9,253	3,862	2,680	21,764	5,568	284
1972-73	50,018	10,307	4,047	2,871	27,205	5,283	305
1973-74	53,816	11,356	4,440	3,231	29,326	5,041	422
1974-75	55,916	12,447	4,773	3,223	29,296	5,095	1,082
1975-76	62,649	13,426	5,425	3,753	32,293	5,706	2,046
1976-77							
Projected	61,800	13,440	5,160	3,860	31,920	5,370	2,050
Actual	67,400	13,574	5,187	3,877	34,363	5,861	1,917
				Projected			
1977-78	65,400	14,210	5,110	3,990	33,580	6,460	2,050
1978-79	66,600	14,630	5,310	4,160	33,830	6,620	2,050
1979-80	68,000	15,310	5,210	4,410	34,310	6,710	2,050
1980-81	69,700	16,150	5,380	4,580	34,750	6,790	2,050
1981-82	70,700	16,410	5,460	4,740	35,170	6,870	2,050
1982-83	72,000	17,020	5,460	4,910	35,610	6,950	2,050
1983-84	73,000	17,410	5,460	4,980	36,070	7,030	2,050
1984-85	73,800	17,620	5,460	5,240	36,940	7,190	2,050

1 Martin M. Frankel, ed., *Projections of Education Statistics to 1986-87* (Washington: U.S. Government Printing Office, 1978), p. 48. Actual data for 1976-77 came from the *Digest of Education Statistics, 1977-78.*

2 M.D. degrees only.

3 D.D.S. or D.M.D. degrees.

4 Includes degrees in chiropody or podiatry, optometry, osteopathy, and veterinary medicine.

5 L.L.B. or J.D. degrees.

6 B.D., M. Div., Rabbi or the first professionad degree in theology.

7 In 1974-75 large numbers of first-professional degrees in chiropractic (D.C. or D.C.M. and pharmacy (D. Phar.) were reported in "other" and have been included in that category since then.

Enrollment increases have come at different times for different professions, although almost all increased along with the whole of post-secondary education during the late 1960s and early 1970s; and overall, continued growth and no declines are predicted for the 1980s.

These enrollment increases will result in larger numbers of professional degrees conferred, as shown in Table 2. The overall increases between 1970 and 1977 in degrees in medicine, dentistry, law, theology, and other health professions are projected to continue through 1985. These trends confirm the predictions of Mayhew (1970) and Anderson (1974), who both forecasted that graduate and professional training would remain the fastest growing segment of higher education in the United States.

The admissions problem for professional schools, then, is how to accommodate this predicted growth within the context of admissions policies that have traditionally limited the number and types of students who are offered the professional school experience. Gordon (1978) and Dube and Johnson (1976) documented the problems for admissions due to increasing numbers of applicants, but considerable changes in admissions criteria have also occurred during the last five years due to the greater diversity of students seeking the few places in professional schools (Gordon 1977), and dissatisfaction with standardized tests (Goolsby 1974) and other forms of objective measurement (Kraft 1977) as criteria for selection.

Examples of the development of new criteria for admissions are especially significant in view of the 1978 Bakke decision, in which racially separate and unequal admissions policies in federally assisted institutions of higher learning were generally forbidden. Schools have been forced by the legal system to use standards other than race to screen applicants who have potential to become successful practitioners. To meet this challenge, some schools are developing measures to test interpersonal skills and abilities necessary for success in actual practice.

Fields (1978) reports on projects that investigate ways to improve the admissions process "by trying more systematically to identify personal qualities and traits that can be linked with competence" (p. 1), especially in business, law, and medicine. Fields mentions the Templeton, et al. study (1979) in which measures using clinical diagnostic problems are being developed for medical school applicants, and Murden and Associates (1978) reported that admissions interview data for University of Missouri-Columbia medical students were a good predictor of clinical success.

To help overcome some of the barriers to the admission of minority applicants, Kell (1974) examined the effects of altering recruitment and admissions strategies at four dental schools that had special programs for minority students. One result of the investigation was interview schedules to be used for minority student interviews, which were indispensable parts of the admission process. In veterinary medical education, screening committees are used to apply standards to individual applicants in at least one region (Dickinson 1977), in spite of some criticism from others in that field that using other-than-objective criteria may not be legal (Hannah 1975). In social work a multivariate predictive index of student field performance has been tested as a potential tool for admissions (Pfouts and Henry 1977). In addition, Baird (1976) showed how test scores from the Graduate Record Examination, the Medical College Admission Test, and the Law School Admission Test could reflect the students' background and educational characteristics, and thus be used more effectively in the admission process.

Unfortunately, there is little in the literature related to new admissions criteria to allow for nontraditional forms of preprofessional education or to accommodate students who wish to apply to programs and seek degrees on a part-time basis. A Talent Identification Program in Western Missouri (Calkins 1978) is mentioned, in which disadvantaged youth are being assisted to pursue careers in health sciences and in preparing for and applying to medical schools. This approach is particularly noteworthy in view of the need for physicians in rural areas and the evidence that physicians with rural backgrounds are more likely to select a rural practice (Cullison 1976).

In addition, some investigation has been conducted to determine whether there are differences in medical school performance between students admitted after only three years of college and those admitted after four (Givner and Klintberg 1978); but in general the future of nontraditional undergraduate preparation for professional schools is questionable. Mayhew (1977), for example, states that although nontraditional forms of education are essentially egalitarian and basically attempt to provide an education to all individuals, regardless of age or previous preparation, they are expensive and still focus on the adult and part-time learner. These people still will probably be excluded from professional schools simply because of sheer numbers—as the total number of applicants increases, so will the competition from more traditionally prepared students. Older, part-time, and less

traditionally educated applicants will still be virtually locked out of the professional school admissions competition.

The Professional School Experience

What then happens to these larger numbers of students, representing more "diverse" backgrounds, after they have survived the admissions process and been admitted to the professional school? Little research has been directed to answer this question since the work of Schein (1972). He reported the professional student view of the curriculum as one in which the sequence or pacing of courses was the main problem: a fixed sequence of courses and graduation in a fixed number of years was seen as too restrictive. Although there have been some efforts to break the lockstep curriculum and length of time that characterized especially the older professions, remnants of it will most likely always remain as one of the most visible differentiations between professional and graduate education.

Student complaints reported by Schein included some of the same concerns voiced by students at all levels and in all aspects of postsecondary education at that time: admissions policies that were too restrictive and exclusionary, an irrelevant curriculum, professional associations that were not responsive to societal needs, professionals who were not delivering a high-quality service to "the right client," and faculty members and older professionals who were not responsive to the desire of young professionals to work on "relevant social problems" (p. 53).

Schein's work has since been supplemented by survey studies conducted by various professional schools and associations that attempt to relate students' views of their educational experience to their later professional life. Although these studies are again somewhat limited to the traditional professions (Baird 1978—law; Gough and Hall 1977—medicine; Ott 1977—engineering), perspectives of Blacks (in social work—Council of Social Work Education 1974; in dentistry—Kell et al. 1974) and Chicanos (in social work—Snachez 1972) have also been examined.

A series of reports growing out of a Wright Institute study of graduate and professional students has been compiled by Katz and Hartnett (1976). This collection focuses primarily on graduate students, and the contributors do not usually make necessary distinctions between them and professional students. The title of the volume, *Scholars in the Making*, reflects the academic bias of its contents, and the contents unfortunately reinforce the tendency of researchers and commentators

to view graduate and professional schools as interchangeable edifices providing interchangeable experiences.

Wolensky (1977) and Baird (1979) have treated the issue of the crisis of confidence experienced by students. Considering the highly competitive admissions process most of them survived, it is not surprising that Baird reports the following:

> . . . Students enter graduate and professional schools with a history of successes behind them. Their self-conceptions, based on these successes, are correspondingly high. As they encounter students with equal ability and accomplishments, their conceptions of themselves as persons with exceptional talents decline. The greater their degree of interaction with other students, the greater the decline in their self-conceptions (p. 4).

In addition, Goad and Plotsky (1976) discussed issues concerning the isolation often felt by women graduate and professional students, as did Rose, Menninger, and Nyre (1978), in their national study of academic women in science and engineering.

Generally, the professional school experience has changed over the past few years, and these changes can mostly be characterized as more rigorous, relevant, and less restrictive. The competition to enter professional study has become more intense in most fields; new specializations, modes of service delivery, practicums, and off-campus experience are curricular staples in most schools; and the twin lock-steps of course sequencing and length of study are even beginning to give way to part-time students and flexible graduation requirements, as will be discussed in the next section.

Institutional change is no longer discussed merely as expansionism, as it was by Mayhew (1971) when he conducted a study to determine which institutions would expand or create graduate and professional programs, in which fields, and at what potential cost. Rather, it is currently presented as a restructuring of professional schools. One successful change model involves the building of a pyramid of measureable goals and objectives in which all objectives feed into and support the accomplishments of those directly above them, beginning with course objectives and ending with school goals. All aspects of the curriculum and organizational structure are then evaluated with respect to their contributions to goal attainment and altered as necessary (Nyre 1975 and Rose and Nyre 1978).

Curricular Development

The movement toward relating structural change to curricular reform by better defining educational goals is reflected in many reports of actual curricular changes and suggestions for potential ones. Fedo (1977) reported on the new emphasis in business and health professions' schools to introduce interdisciplinary liberal arts courses to better prepare professionals for practice. Schein (1972) proposed that behavioral and social sciences needed to be integrated into professional school curricula, with an emphasis on applied behavioral science (dealing with the theory and practice of planned change, self-insight, social responsibilities and learning how to learn) (p. 67). Armstrong (1977) discussed the fact that the structure of medical educational courses influenced the conceptualization of the medical meaning of disease, and implied that if an operational definition of "disease" were first determined, then the structure of courses to teach about it could be developed.

Medical schools appear to lead other professional schools in numbers of published reports concerning curricular reform (see Cassata et al. 1976; Levine et al. 1977; Edenburg et al. 1978), although there are similar curricular changes in other fields. In law, clinical courses with case supervision are provided by government agency personnel (Bergman 1978), while the American Bar Association and deans of law schools struggle to determine just how clinical courses can be integrated into a three-year legal curriculum (Jacobson 1979).

Southwestern Law School in Los Angeles has developed an experimental curriculum that abandons the casebook method, eliminates all traditional courses, and compresses the three academic years of law school into two calendar years. Legal relationships and concepts are considered in the first year, and during most of the second year the classroom functions as a law office, with faculty and students acting out the roles of senior partners and junior associates.*

In veterinary medical education, the University of Tennessee and Michigan State University are experimenting with clinical training, especially in surgery (Krahwinkel 1977; Morrow 1977). Colorado State University has developed a strong program of interdisciplinary courses in biomedical sciences (Tietz 1977), and a regional program in veterinary medical education has been developed in Washington, Oregon, and Idaho (Bustad et al. 1977). In pharmacy, individualized instruction is offered at Creighton University (Tindall 1978), new electives emphasizing interdisciplinary approaches (see Sumner 1978) and ethics (see Braucher 1978) have been introduced, while the issues of clinical training are also being discussed (Witiak 1977; Winter 1977), as they are in social work (Hanna and Marziali 1977).

Flexibility in curricula has been accompanied only somewhat by flexibility in the pacing of the professional school experience. The University of Arizona College of Medicine offers a three-year, flexible-time curriculum under which students can extend their program for a year or more, and 30 percent of the students have taken that option (Barbee and Dinham 1977); the University of Miami School of Medicine offers a 24-month program for scientists who already have earned a Ph.D. degree (Holloway 1977), and the need to extend engineering education has at least been discussed in the literature (Schaub 1977). The UCLA School of Dentistry allows graduation within a three- to six-year period (Rose and Nyre 1978).

Change has characterized the curricula of even the most traditionally staid professional schools during the past few years, and will most likely continue for some time as new models are tested and, when found appropriate, adapted at other schools. Many of these changes have come as a response to students' pleas for relevancy and social concern, as is chronicled in the next chapter.

Faculty Training, Evaluation, and Rewards

The training and evaluation of faculty in professional schools has

*This example is based on conversations with Dean C. Bovack, who designed and directs the experimental program known as SCALE (Southwestern's Conceptual Approach to Legal Education).

become the subject of much attention in the past few years. While evaluation is mixed with decisions of hiring, promotion, tenure, and salary, and thus becomes a political matter in the eyes of most faculty, a major purpose of faculty evaluation is the improvement of teaching and learning. Thus, faculty evaluation has become an integral part of many faculty development programs, particularly in the health professions. (See, for example, Nyre and Rose 1976; Rose, Nyre, and Marantz 1978.)

According to Mackenzie (1977), an effective faculty development program is an "essential companion" to a good faculty evaluation system, since the development program can be used to improve teaching skills and administrative skills and also to encourage research activity and continuing education. Reviews showing that evaluation is an effective means for improving instruction have been published by Centra (1972), Costin et al. (1971), and McKeachie, et al. (1971).

The difficulties of training faculty and providing development programs for them are exacerbated in professional schools due to their extensive use of part-time faculty. If the goal of faculty development is to improve the quality of instruction, then a development program is as important for adjunct faculty members as it is for full-time faculty. However, according to Ernst and McFarlane (1978), part-time faculty often lack enough knowledge of the educational program or facility in which they work, they do not contribute to building a cohesive faculty, and they often pose a threat to the exercise of uniform standards for student performance (p. 97). Nevertheless, professional schools, as well as four-year colleges and universities, must develop strategies to deal with the part-time faculty member, since, as Hine and Latack (1978) point out, part-time faculty contribute high productivity at reduced cost. And, according to Leslie (1978a), full-time faculty will increase only by 3.2 percent between 1975 and 1985. While some professional schools are limited by their accrediting agencies to the percentage of part-time faculty they may employ, such as business schools, where only 25 percent may be part-time (Jacobson 1979), most schools are experiencing an increase in their numbers. Medical and dental schools, in particular, have always made extensive use of part-time faculty. For example, Chambers (1977) points out that in 1976, 55 percent of the nearly 11,500 American dental educators held part-time appointments. Laswell and Hill (1976) have provided a composite picture of these dual professionals and listed the particular needs and problems associated with their employment. These problems include scheduling, remuneration, school philosophy, communi-

cation, attendance at meetings, educational background, and difficulty in using conventional criteria in evaluating their performance for rank and salary considerations.

Margulies and Blau (1973) reported that the average annual salary of tenured faculty members in professional schools in 1971-72 was 11 percent higher than the average faculty salary paid to all tenured faculty in colleges and universities (p. 23). A more recent survey of median salaries for administrators (*The Chronicle of Higher Education*, April 9, 1979) reveals that Deans of Medicine and Dentistry earn median salaries of more than $50,000 per year, while Deans of Humanities, Instruction, and Social Sciences earned median salaries of between $27,000 and $28,000.

Several authors have treated the subject of part-time faculty and their financial and legal status (Leslie 1978a, 1978b; Tuckman 1978; Tuckman and Vogler 1978). Leslie (1978b) warns that the use of part-time instructors is not the panacea that many view it to be, suggesting that "policy initiatives should draw carefully rationalized distinctions among . . . types of part-time faculty and . . . types of part-time work. Individualized terms of employment may be essential to the development of fair practice" (p. 5).

Such a cautionary statement is needed because the professional schools' use of part-time or adjunct faculty is attracting increasing interest among other segments of postsecondary education as enrollments slacken and budgets tighten. Some professional schools, which have not used adjunct faculty to a great degree in the past, are also considering increasing their numbers. While it is true that certain professional schools have successfully used part-time faculty for years, one cannot make a quantum leap to follow their lead without more consideration than has been evidenced in the literature so far.

Although it may be a matter of degrees, adjunct faculty in the professional-school setting typically are not being exploited and abused for the sake of economics, as Lauter (1979) claims is the case at the undergraduate level. Rather, there are two major differences between the professional and undergraduate schools that are particularly germane to this topic and make comparisons and exemplifications unfair. First, there is a *historical tradition* of using practitioners as adjunct faculty in professional schools. In fact, it is a direct outgrowth of the apprenticeship method of professional certification, which is centuries old. Second, professional-school adjunct faculty are mostly *dual professionals*. That is, they have a professional identity beyond their role as a college professor. And that former, and usually primary role

awards them another source of income (usually much larger than that received for teaching), retirement plans and security—benefits that adjuncts in undergraduate education usually do not have.

Before colleges and universities continue to rush headlong to emulate this practice, they must realize that professional schools did not just decide to hire adjunct faculty in large numbers. It is a practice that has evolved in response to the goals of professional education and the needs of the educational process: practitioners were deemed suitable, in fact even desirable as teachers and models in the classrooms, laboratories, and the field. Would-be emulators must answer the question: Why do *we* want more adjunct faculty? If the answer is solely economics—the most likely one in these times of economic stringency—they should reconsider. Economic realities will likely win out in the end.

If the undergraduate schools can make as educationally valuable a use of adjuncts as the professional schools have done, the students will have been well served. However, the model by which to employ, release, pay, retain, and otherwise treat adjunct faculty at the undergraduate level will have to come from that segment and be responsive to its needs. Professional schools would be an unwitting example and an unwilling model for such endeavors.

Labor Market Prospects

Just as the characterization of the student experience in professional school is receiving more detailed attention from researchers, students' prospects for employment in the professions are also being investigated; but, in general, the literature offers little systematic treatment of the labor-market outlook for the professions as a group. Gordon's (1974) work represents an initial treatment of the topic, but makes no predictions for the professions in general; Kahne (1976) dealt with manpower forecasts through 1976, but she focused on the role of women in the work force; and selected professional associations or journals restrict their forecasts to their own professions and emphasize overall labor-force participation rates (e.g., Engineering Manpower Commission of the Engineers Joint Council 1979).

Anderson (1974) attempted to make some predictions concerning increases in the numbers of professionals in the workforce, and concluded that the number of professionals in the workforce would increase and that the proportion of the workforce that is professional would also increase, despite the lessening population growth and lower postsecondary enrollments.

An updating of Anderson's original tables of professional workers in the population and workforce (see Table 3) reveals that the increases he predicted did not occur between 1975 and 1978. Although there was a slight gain in the percentage of professional workers in the population (from 6.0 percent in 1975 to 6.5 percent in 1978), the percentage of professionals in the workforce remained almost the same (15.1 percent in 1978, compared to 15.0 in 1975).

The changes in the distribution of the sexes across professional occupations, however, is striking. As revealed in Tables 4 and 5, the occupations in which large percentages of men and women were employed in 1970 accounted for a much smaller percentage by 1978. Whereas 85.1 percent of the male professional workforce were employed in engineering, accounting, medicine, law, teaching, or religious positions in 1970, these occupations accounted for only 52.1 percent of the male professional workforce in 1978. Similarly, the percentage of women employed in teaching, nursing, accounting, social work, and library science dropped from 93.4 percent in 1970 to 67.9 percent in 1978.

Table 3. Number of Professional Workers and Percentages of Professional Workers to Population and Workforce: 1970, 1975, and 1978.[1]

	1970			Percentage	
	Population	**Workforce**	**Professional**	**Population**	**Workforce**
Males	98,912,192	52,076,663	4,274,358	4.3	8.2
Females	104,299,734	30,820,770	3,579,261	3.4	11.6
Total	203,211,926	82,897,433	7,853,619	3.9	9.5
		1975			
Males	104,202,000	51,209,000	7,483,000	7.2	14.6
Females	109,338,000	33,574,000	5,265,000	4.8	15.7
Total	213,032,000	84,783,000	12,748,000	6.0	15.0
		1978			
Males	106,464,000	55,491,000	8,162,000	7.7	14.7
Females	111,973,000	38,882,000	6,083,000	5.4	15.6
Total	218,437,000	94,373,000	14,245,000	6.5	15.1

[1] Data for 1970 were taken from Anderson (1974, p. 21). Population data for 1975 and 1978 were drawn from Bureau of the Census, *Population Estimates and Projections*, p. 25, No. 704. Numbers of professionals and of workforce came from Bureau of Labor Statistics, *Employment and Earnings*, January 1976, 22, No. 7 and January 1979, 26, No. 1.

These changes can be attributed somewhat to shifts between 1975 and 1978 in the types of professional occupations entered by females (see Table 6). Although women registered only a slight gain in the percentage of professional and technical workers they represented between 1975 and 1978 (from 41.3 percent to 42.7 percent), there were some significant increases in the percentages of women in certain occupations (e.g., computer systems analysts, engineers, lawyers and judges, life and physical scientists, operations and systems researchers and analysts, personnel and labor relations workers, religious workers, social scientists, and technicians).

Table 4. Changes in Numbers and Percentages of Males in Selected Professional Occupations, 1970-1978. (These numbers are of Total Male Professional Workers and the Total Male Workforce: 1970, 1975, and 1978.[1]

Occupation	1970	Percentage		1975	Percentage		1978	Percentage	
	Number (Male)	Male Professional	Male Workforce	Number (Male)	Male Professional	Male Workforce	Number (Male)	Male Professional	Male Workforce
Engineers	1,210,400	28.3	2.3	1,137,350	15.2	2.2	1,229,580	15.1	2.2
Accountants	525,750	12.3	1.01	762,763	10.2	1.5	681,525	8.3	1.2
Noncollege Teachers	823,001	19.3	1.6	888,468	11.9	1.7	867,680	10.6	1.6
Physicians, Medical and Osteopathic	255,667	6.0	0.49	307,980	4.1	0.60	376,088	4.6	0.68
Lawyers and Judges	260,109	6.1	0.50	364,168	4.9	0.71	452,094	5.5	0.81
Clergymen	212,654	5.0	0.41	268,128[2]	3.6	0.52	276,900[2]	3.4	0.50
College Teachers	350,505	8.2	0.67	374,127	5.0	0.73	372,044	4.6	0.67
TOTAL	3,638,086	85.1	7.0	5,240,334	70.0	10.2	4,255,911	52.1	7.7
Total Male Professional	4,274,358			7,483,000			8,162,000		
Total Male Workforce	52,076,663			51,209,000			55,491,000		

[1] Data for 1970 were taken from Anderson (1974, p. 25). Numbers of professionals and of workforce came from Bureau of Labor Statistics, *Employment and Earnings*, January 1976, 22, No. 7 and January 1979, 26, No. 1.

[2] Listed as religious workers.

Table 3. Changes in Numbers and Percentages of Females in Selected Professional Occupations, 1970-1978. (These numbers are the Total Female Professional Workers and the Total Female Workforce: 1970, 1975, and 1978.)[1]

Occupation	1970			1975			1978		
		Percentage			Percentage			Percentage	
	Number (Female)	Female Professional	Female Workforce	Number (Female)	Female Professional	Female Workforce	Number (Female)	Female Professional	Female Workforce
Noncollege Teachers	1,956,045	54.7	6.4	2,133,532	40.5	6.4	2,124,320	34.9	5.5
Registered Nurses	819,268	22.9	2.7	936,950	17.2	2.7	1,075,304	17.7	2.8
Accountants	186,953	5.2	0.61	192,372	3.7	0.57	293,475	4.8	0.75
Social Workers	138,856	3.9	0.45	179,968	3.4	0.54	241,780	4.0	0.62
Librarians	101,542	2.8	0.33	145,980	2.8	0.43	158,015	2.6	0.41
College Teachers	140,372	3.9	0.45	168,873	3.2	0.50	189,956	3.1	0.49
TOTAL	3,343,036	93.4	10.9	3,727,675	71.6	11.1	4,082,850	67.9	10.5
Total Female Professional	3,579,261			5,265,000			6,083,000		
Total Female Workforce	30,820,777			33,574,000			38,882,000		

[1] Data for 1970 were taken from Anderson (1974, p. 25). Numbers of professionals and of workforce came from Bureau of Labor Statistics, *Employment and Earnings*, January 1976, 22, No. 7 and January 1979, 26, No. 1.

Table 6. Comparisons of Percentages of Female Professional and Technical Workers, 1975 and 1978.[1]
(numbers in thousands)

Occupation	1975 Total Employed	1975 % Women	1978 Total Employed	1978 % Women
Accountants	782	24.6	975	30.1
Architects	70	4.3	69	5.8
Computer specialists	363	21.2	428	23.1
Computer programmers	223	25.6	247	26.7
Computer systems analysts	122	14.8	152	21.1
Engineers	1,150	1.1	1,265	2.8
Aeronautical and astronautical engineers	51	—	59	—
Civil engineers	160	1.3	160	1.9
Electrical and electronic engineers	290	1.4	329	1.8
Industrial engineers	187	2.7	206	8.7
Mechanical engineers	200	1.0	216	.9
Foresters and conservationists[2]			58	6.9
Lawyers and judges	392	7.1	499	9.4
Lawyers	374	7.2	479	9.4
Librarians, archivists, and curators	190	78.4	202	80.7
Librarians	180	81.1	187	84.5
Life and physical scientists	277	14.4	273	17.9
Biological scientists	54	31.5	58	37.9
Chemists	131	14.5	118	14.4
Operations and systems researchers and analysts	124	15.3	129	21.7
Personnel and labor relations workers	326	36.5	405	43.7
Physicians, dentists and related practitioners	647	11.3	756	10.4
Dentists	110	1.8	117	1.7

(Continued on Next Page)

Table 6. (Continued)

Occupation	1975 Total Employed	1975 % Women	1978 Total Employed	1978 % Women
Pharmacists	119	17.6	136	16.9
Physicians, medical and osteopathic	354	13.0	424	11.3
Nurses, dieticians, and therapists	1,126	91.8	1,351	92.9
Registered nurses	935	97.0	1,112	96.7
Therapists	157	60.5	189	70.4
Health technologists and technicians	397	72.3	498	70.9
Clinical laboratory technologists and technicians	177	74.6	208	73.6
Radiologic technologists and technicians	79	69.6	97	67.0
Religious workers	304	11.8	325	14.8
Clergy[2]			262	3.8
Social scientists	189	24.3	255	33.7
Economists	99	13.1	118	22.9
Psychologists	61	42.6	106	48.1
Social and recreation workers	402	58.5	505	61.0
Social workers	296	60.8	385	62.3
Recreation workers	107	51.4	121	57.0
Teachers, college and university	543	31.1	562	33.8
Teachers, except college and university	3,022	70.6	2,992	71.0
Adult education teachers	56	46.4	81	49.4
Elementary school teachers	1,332	85.4	1,304	84.0
Prekindergarten and kindergarten teachers	214	98.6	299	96.5
Secondary school teachers	1,184	49.2	1,154	51.6
Teachers except college and university, n.e.c.[3]	234	76.1	224	75.9
Engineering and science technicians	896	11.8	985	13.4

(Continued on Next Page)

Table 6. (Continued)

Occupation	1975 Total Employed	1975 % Women	1978 Total Employed	1978 % Women
Chemical technicians	76	14.5	76	21.1
Drafters	301	9.3	296	11.1
Electrical and electronic engineering technicians	177	5.6	227	7.9
Surveyors	70	–	82	2.4
Technicians, except health, engineering and science	154	11.7	173	17.3
Airplane pilots	60	–	69	1.4
Radio operators[2]			53	47.2
Vocational and educational counselors	144	48.6	171	52.6
Writers, artists, and entertainers	1,055	34.4	1,193	35.5
Athletes and kindred workers	106	32.1	101	40.6
Designers	125	25.6	161	27.3
Editors and reporters	177	44.6	184	42.4
Musicians and composers	139	51.7	149	30.9
Painters and sculptors	146	46.6	186	44.6
Photographers	76	17.1	93	14.0
Public relations specialists and public writers	115	32.2	131	40.5
Research workers, not specified	95	32.6	122	32.0
All other professional and technical workers	100	28.0	54	37.0
TOTAL PROFESSIONAL AND TECHNICAL WORKERS	12,748	41.3	14,245	42.7

[1] Bureau of Labor Statistics, *Employment and Earnings*, January 1976, 22, No. 7 and January 1979, 26, No. 1.

[2] This category does not appear in the 1975 report.

[3] N.E.C. is an abbreviation for "not elsewhere classified" and designates broad categories of occupations that cannot be more specifically identified.

The improvement shown in the participation of women in the professional labor force is likely to be reflected in higher numbers of minority professionals also, as reported by Schneider (1977) in one of the most recent and comprehensive studies of the future professional labor market. Using a projection model for the period 1970-1985, which incorporated current trends in minority and female employment, and also accounted for potential labor force entrants and entry and separation rates, he predicted the area of largest growth for Blacks in the fields of engineering (industrial, electrical, mechanical), accounting, other business and management, medicine and dentistry; whereas the largest increases between 1970 and 1985 for women were predicted to be in law, engineering (industrial, chemical, and mechanical), and dentistry (p. 269).

Continuing Education and Licensure

The education of professionals has increasingly been extended beyond the boundaries of graduation due to the development of continuing education courses. Many professional schools provide continuing education courses, and individual programs are described in a variety of publications (in medicine, Whitney and Caplan 1978; and Kenneth 1978; in nursing, Smith 1978; and Signe 1978; in library science, Martell and Dougherty 1978; Snyder and Sanders 1978; and Gwinn 1979; in pharmacy, Gross 1976; and Kelly and Herman 1978; in veterinary medicine, Tuttle 1977). In general these articles deal with the principles and techniques of presenting new academic information within the context of the psychology of adult learning (taking into account different learning styles, human resources, and attitude development). Tuttle (1977) pointed out that without such a consideration of adult learning characteristics, mandatory continuing education results only in the attendance of the participants, not in their learning.

The blossoming of continuing education programs has been encouraged by the efforts of state and federal governments, universities, professional schools, and professional associations working together. The U. S. Office of Education has developed the Continuing Education Technical Assistance Center to inform nationwide audiences about successful programs. The center conducts workshops and plans to develop a nationwide information network on continuing education (Watkins 1979a, p. 3).

Collaboration between professional associations, universities, and professional schools has expanded to the extent that 92 percent of

university extension divisions and 50 percent of the associations now have some kind of cooperative arrangement in their continuing education programs (Watkins 1979, p. 6). The rationale for this kind of collaboration, which seems to be a modern form of the historic link between professional education and universities, was provided by Quentin H. Gessner, Dean of Continuing Studies at the University of Nebraska, as quoted by Watkins:

> The professional schools have faculty members with expertise, but they lack the marketing skills for continuing education. The professional associations have an understanding of their members and the programs they need to improve their competence. The extension divisions have the means to put on a program. Although they may lack academic skills, they can be a catalyst for interdisciplinary programs, and they can provide risk capital for the schools and associations to work together.
>
> The extensions can be a one-stop shopping service for professional continuing education (p. 6).

More recently, continuing education has become the concern of state licensing boards. When these boards were initiated for certain professions, their dual purpose was to adopt standards for entry into a profession and to monitor the competence of licensees; however, the latter purpose was all but forgotten as the myth "once licensed, forever competent" won the day (Shimberg 1977). In addition, while the intent of the boards was to protect the public from incompetence, some contend that the restriction of competition and protection of the professionals themselves has been as much, if not more of a function of such boards (Kasper 1977; Wallis 1977).

In attempting to reply to the former criticism of licensure, a new concept calling for mandatory continuing education (MCE) is gaining momentum; some professional associations are requiring it for membership renewal and some legislatures are passing laws designating the number of hours of continuing education a person must take to maintain a license. Current and pending MCE legislation in California alone affects in excess of 600,000 professionals.*

Such legislation and membership requirements have given birth to at least two new "mini-industries"—those persons keeping track of class attendance (or in some cases audio or video cassette watching) and those producing and providing the classes and materials. Although some agencies and associations have expended considerable effort to

*Many of the comments concerning MCE are based on personal conversations with Russell L. Riese, California Postsecondary Education Commission, who is conducting a study of MCE in California on behalf of the Commission.

ensure that some quality control is exercised, no comparable effort has been made to determine if the persons taking the courses are in fact learning anything that will help them in their practices. Physical presence is assumed to equal learning, and credit is awarded—not unlike some other quite traditional educational endeavors.

The debate on MCE has begun and will continue into and perhaps throughout the 1980s. And the basic, unresolved issues with which those involved will be grappling will be the same as those that have plagued educators for years—an unwillingness to define the competencies desired; an unwillingness to identify the best strategies to enable someone to learn them; and an inability to measure attainment of competencies because they are inadequately defined. Le Breton et al. (1971) have compiled both theoretical essays and reports of systems for evaluating continuing education for professionals; perhaps this will mark the beginning of a more careful analysis of the practices of continuing education. If not, the cycle described above will continue, along with the debate.

Professionals traditionally have set their own standards for judging both the quality of their work and the adequacy of their training. These mechanisms were originally quite informal and the highest prestige was given to those professionals with the highest salaries. As training programs and schools developed, they were judged by the prestige of the faculty, the quality of the entering class, and the quality of jobs received by graduates. Since many of the first American training programs were offered in private, profitmaking schools, the amount of money the school made probably affected its status also. These processes have evolved into formal accreditation and peer judgment surveys, but many of the early considerations remain in current discussions of quality in professional education and practice.

Accreditation

The concern exhibited by state licensing agencies over quality control of continuing education programs is paralleled by the growing attention paid by professional associations to the issue of accreditation. The six regional accrediting associations, which traditionally have been concerned with undergraduate programs, have only recently devoted attention to graduate schools (Mayhew and Ford 1974, pp. 172-73).

In a discussion of the various types of accreditation, Trivett (1976) makes the distinction between institutional (general or regional) and specialized (program or professional) accreditation. He explains that institutional accreditation is not tantamount to specialized accreditation, since it applies to the entire institution and does not validate special programs (e.g., professional ones) within an institution. Eligibility for institutional accreditation is determined largely by general criteria set up by private, nongovernmental accrediting agencies, although there is some involvement by the U. S. Office of Education, which determines the eligibility of institutions and their students by recognizing certain accrediting agencies. Glennan (1968) provides a list of accredited schools and a summary of accrediting activities in some professional fields. A current list of professional accrediting agencies was provided in the December 11, 1978 issue of the *Chronicle of Higher Education*.

The need for professional schools to meet certain standards different from those of the university can create tensions between the two. This

can also be the case within areas that were formerly thought to be the same profession. A case in point is the field of accounting, where the American Assembly of Collegiate Schools of Business, after more than a one-year battle, reversed itself and will now permit separate accreditation standards for accounting than those used for other business fields. The debate on this topic was spurred by the desire of the University of Mississippi to create a separate school of accountancy (Jacobson 1979).

The concept of accreditation in the professions is complicated by the fact that each professional association has its own criteria, with both the categories included among them and their stringency wide-ranging. Furthermore, not all professional schools receive accreditation—the intention of which might be, one would think, to keep them from turning out professionals not "up to standard." Yet, many of these schools thrive and their graduates pass state licensing examinations. Although serious questions can be raised concerning the relevancy of licensing examinations in the first place, the point is that nonaccreditation does not deter a school from graduating professionals or them from practicing. Whether it should is a point usually argued without reason.

The Board of Governors of the California State Bar has moved beyond argument, however, and recently approved a proposal that calls for phasing out the state's 24 unaccredited law schools within the next five years and urges legislation requiring attendance at and graduation from an accredited law school as a prerequisite for admission to the California Bar (Bandow 1979). Apparently, they do not believe accreditation and the Bar Exam adequately serve the requirements of entrance into the profession.

Although accrediting is often the function of the corresponding professional society, which in the health fields of medicine, osteopathy, dentistry, podiatry, and optometry often includes representatives from other related professional societies, there are exceptions to this pattern that have been the subject of criticism. In the field of nursing, for example, Brodie and Heaney (1978) reveal that nursing accreditation is under the direction of the National League for Nursing (NLN), which is different from the major association of professional nurses (American Nurses Association) and from the American Association of Colleges of Nursing, the professional school association. To address this kind of problem, the authors propose a model for a multiprofessional accrediting mechanism that emphasizes accrediting teams that are multiprofessional in nature, with the composition of the

teams augmented as necessary according to the needs of a specific program, and with the explicit function of evaluating the interprofessional contexts of the programs under scrutiny. They propose this model with the realization that:

> self-regulation may be facing its last chance to prove that it can do the job. Accreditation, as it has been known, has moved from crisis to crisis in a system fraught with fragmentation, compromise, duplication, inconsistencies, and special interest groups. Heretofore, leadership has always come forth and means have been found to deal with new and recurring problems, and there has always been an attempt to provide standards, procedures and policies that would serve the broader interests of higher education and its institutions. A new leadership is now required to provide the initiative to reform accrediting in the health professions and perhaps in other groups of professions with common interests (p. 593).

The Rating Game

The formal imposition of professional standards through accreditation or licensure has been accompanied by informal rating reports intended to convey some form of assessment of the quality of various professional schools, but these assessments have typically been made only within the context of reports that include ratings of graduate school program offerings; only one poll has been published that focuses exclusively on professional schools (Margulies and Blau 1973; Blau and Margulies 1974).*

The other opinion polls are familiar enough to most sojournors in education that they can simply be referred to as the "Cartter," "Roose-Anderson," and "Ladd and Lipset" reports. Scully (1979) has provided the most recent summary of these studies. For the purpose of the present topic, it should be pointed out that Cartter and Roose-Anderson only included one professional school (engineering) among their samples, and Ladd and Lipset only included five (business, education, engineering, law, and medicine).

The usefulness of such rankings does not lie in their much publicized role as a quick method of assessing which professional schools are best; rather, conceding for a moment that they do reflect a somewhat accurate picture of quality, these ratings could provide a starting point to determine what factors distinguish the best from the rest, as those characteristics would have definite implications for improving professional education. This clearly should be an imperative of the next survey done in this area.

*The later reference represents a replication of the earlier study, which was the target of criticism because of its low response rate (36 percent); the 1974 survey received a 79-percent response rate.

A final point about professional-school ratings: they have come almost exclusively from within the educational sector of the professions, usually from faculty or deans interested in or responsible for professional training. There are no published ratings of professional schools as a group provided by practicing professionals. Although the opinions of educators are important in an assessment of professional education, the views of practicing professionals would surely also be valuable.

A View From the Present Looking Ahead: Summary and Recommendations

Professional education in the next decade will be characterized by change and renewal based on already existing practices, not by the creation of totally new directions or professional schools. Gone are the days of expansionism, in which model schools for the professions were established. Instead, a trend toward integration, cooperation, collaboration, and outreach will typify professional education and will replace the disposition toward exclusivity that has been its hallmark in the recent past. Since the early 1970s, professional education has grown as a result of the integration of theory and practice and the development of collaboration and cooperation. These frames of reference will be used to summarize the topics discussed in the previous sections of this review and to help raise some issues faced not only by professional education, but by other forms of postsecondary education as well.

Integrating Theory and Practice

The struggle to identify occupations that qualify as professions, to determine the characteristics of a professional person, and to differentiate professional education from other forms of academic training, are all examples of how professional education is perceived in both theory and practice. The historical and modern development of education for professionals consistently has been linked to the notion of practical training grounded in a theoretical framework. Close ties to universities have established a relationship to the sources of knowledge and theory; the influence of professional associations and accrediting or licensing bodies has provided the tie to quality in the practical delivery of services.

From the viewpoint of student admissions and the professional school experience, the integration of theory and practice is also evident. Keen competition from larger numbers and more diversified types of applicants and the prospect of increasing enrollments have caused most professional schools to move beyond admissions criteria, which represented previously ideal theories of student selection. These theories, which called for the almost exclusive use of objective measures, have been increasingly supplemented by more subjective measures to determine an applicant's other dimensions, especially interpersonal skills (Fields 1978). Interviews are now seen as crucial; some dental

schools have even developed a codebook for interviewing minority students (Kell 1974), and some medical schools are moving toward performance measures taken at the time of the interview (e.g., measures of potential to conduct patient interviews, as in Templeton et al. 1979). Although performance as part of the admissions process is not universally practiced by all professional schools, it represents a trend away from product-orientation and toward permitting an applicant to be judged during the process of the application interview.

These approaches are worthy of consideration by other institutions of postsecondary education. Undergraduate colleges, especially those faced with a declining applicant pool in the next twenty years, may wish to develop similar nontraditional measures as a means of identifying applicant potential.

The actual professional school experience has been modified in the aftermath of the cries for more relevancy during the early 1970s. Again, theory and practice have been integrated, and more courses providing actual clinical experiences and "simulational" training sites have been called for (Gardner 1976). The experience resulting from these courses represents a potential advantage for professional school graduates, even though the labor market (especially for women and minorities) is expected to continue to be favorable.

Unlike most postsecondary education, the problem for professional school curricula is not only how the theory and practice of a skill can be integrated into a course in an academic setting; a further issue is how that integration can be delivered best so that students can eventually become truly responsive to their clients-as-consumers. Steps to address this issue have been taken by professional education. Part-time and adjunct faculty have brought practical experience and expertise and will continue to be used, despite certain disadvantages to employing them and some restrictions on their numbers imposed by some accrediting bodies. Professional development has begun to be recognized in some professional schools as an umbrella term encompassing different kinds of faculty, administrative, organizational, institutional, and instructional development. This holistic interpretation of professional development has only recently been advanced in the general literature of postsecondary education (Gaff et al. 1978; Rose, Nyre, and Marantz 1977), but should be considered by undergraduate and graduate institutions as well.

Similarly, professional school faculty have learned that evaluation of institutional goals and teaching performance is the key to development, and that a lack of adequate internal quality controls may re-

sult in more stringent accreditation standards established by professional associations or mandated by governmental agencies. Regardless of differing opinions regarding its source, this kind of quality control emphasizing theory and practice seems highly preferable to the ratings of professional schools based on survey research, which reinforce traditional and unproven measures of quality and still provide little help in distinguishing the actual characteristics of schools of varying quality.

These examples suggest that it is perhaps not useful, and may even be detrimental, to raise the concept of theory versus practice as an issue in professional education and to thus highlight the conflict between "scholars" and "practitioners." Too often there is so much focus on the divisiveness of this situation that discussions concerning a healthy integration of the two are not forthcoming. As long as theory and practice are viewed as separate entities—to be balanced, not integrated—and "scholars" and "practitioners" are viewed as adversaries —to be separated, not reconciled—the progress of professional education will be hindered. It will be unable to further improve its services to students, society, or even itself. Those looking to professional education as a model for integrating careerism and vocational training with the more traditional modes of undergraduate and graduate education will also find it wanting.

Collaboration and Cooperation

Professional education has provided models of collaboration and cooperation that serve as vehicles for the integration of theory and practice. The new admissions criteria discussed previously (Fields 1978) were the result of cooperative efforts among the Educational Testing Service, professional schools, and professional associations. The costs incurred by the whole medical school admissions process have been studied by Hollander et al. (1973), who have recommended that legislators, health planners, and researchers in medical education cooperate to consider how the 50 percent of medical school applicants who are not accepted each year could become a potential health-manpower resource.

Collaboration between professional associations, universities, and professional schools has expanded to the extent that 92 percent of university extension divisions and 50 percent of the associations now have some kind of cooperative arrangement in their continuing education programs (Watkins 1979b, p. 6). This kind of collaboration seems to be the modern form of the historic link between professional education and universities.

Continuing education has recently become the concern of state licensing boards, and mandatory continuing education (MCE) for relicensure is gaining momentum on several fronts. Some professional associations are requiring it for membership renewal and some legislatures are passing laws designating the number of hours of continuing education a person must have to maintain a license.

In general, professional associations will probably continue to cooperate with graduate schools to develop multiprofessional accrediting mechanisms involving related graduate programs (as in Brodie and Heaney's (1978) model. The partial realization that graduate education is to some extent professional education (Anderson 1974) will be fully recognized, as professional associations assume a more cooperative stance. This will no doubt be further encouraged by funding from the federal government, which under Title IX from the Office of Higher and Continuing Education has already provided the Graduate School of Arts and Sciences at Washington University, St. Louis, with an interdisciplinary Graduate and Professional Opportunities Program (*Chronicle of Higher Education* 1979).

Collaborative research efforts in professional education have begun and probably will continue in the direction indicated by Fields (1978) and Yunker (1978), who employ new techniques to measure subjective aspects of faculty, students, and program development. Yunker, in particular, sees ethnomethodological research (an unmbrella term used to include naturalistic study, participant observation, and ethnographic research) as applicable to professional education studies. She stated that it is:

> of vital importance in education of the professions where we are constantly in search of the key indicators or turning points along the career road which separate the truly competent members of a profession from those who are markedly less so (p. 3).

The professions are not always willing participants in cooperative efforts that could undermine their in-house regulatory aspects and the semiautonomous nature of both their schooling and practice. Even though consumerism has brought about some changes in service delivery, there continue to be calls for much more public involvement in monitoring the professions.

Slayton and Trebilcock (1978) have edited a series of essays that relate the professions and public policy. Although not all of their contributors are in full agreement with them and caution against potential abuses, Trebilcock believes that some concept of public

interest must be involved in the regulation of the professions. Slayton urges that public policy should be fraught with considerations of professional supply, demand, and geographic distribution, since the professions play such an important economic role in society.

Recommendations

Based on the review of literature presented in this monograph, it would appear that professional schools and associations should be encouraged to continue to cooperate actively with undergraduate and graduate schools and with private and governmental groups. This cooperation should take the form of promoting:

- The refinement of admissions criteria to incorporate measures of personal development and interpersonal skills essential to the delivery of services to a client;
- The integration of theoretical and practical perspectives in the undergraduate curricula, preparing students for a wide range of professional study;
- The introduction of strategies for professional development that would incorporate faculty, administrative, organizational, institutional, and instructional development;
- The reassessment of restrictions on numbers of part-time faculty, with a view toward faculty-sharing among various professional schools as well as institutions;
- The establishment of a mechanism to incorporate the suggestions of currently existing government policymaking bodies concerning accreditation standards for professional schools; and
- The evaluation of mandatory continuing education courses for professional relicensure to determine their actual benefits to the practitioners and society.

With these recommendations as a guide, both professional schools and other institutions may face the next decades in a stance of preparedness rather than stalemate.

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